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ABSTRACT

Universities around the world have changed dramatically in the period since World War II. Although the basic concerns of higher education (teaching, research, and service) have remained unchanged, the reality of expanded numbers and increased responsibility in a number of areas has placed immense pressure on universities. Seven goals essential to higher educatoin reform issues are new university structures, interdisciplinarity, accountability, administrative efficiency, relevance, democratization and participation, and increased responsiveness to society. Post-war reform forces: the demands of government for a new academic program or pressure by the public for increased access to higher education. In many cases they involve spending outside funds. Internally, the faculty is crucial to any reform's success. Tradition impinges on the reform process, oftern inhibiting rapid change. Students can also stimulate change, and even help develop and implement reform proposals. Examples in a variety of countries and systems (Sweden, West Germany, France, Japan, India, Great Britain) illustrate the complexity of the reform process. The German and British models hold some useful lessons for achieving controlled expansion in the United States. Reform often has unanticipated results or can engender serious opposition, and illustrate how not to achieve true reform. (MSE)

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UNIVERSITY REFORM: AN INTERNATIONAL PERSPECTIVE

Philip G. Altbach

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University Reform: An International Perspective

Philip G. Altbach

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Foreword

Too often, it is thought that American higher education and the pressures exerted on it by society are so unique that little can be learned by examining what is or has happened to higher education in other countries. This restrictive thinking fails to take into consideration the possibility that internal and external stimuli in other countries have prompted different approaches that might have applicability in the United States. In some cases, different approaches to similar conditions met with the same success, in other cases, the same approach met with very startling differences. An examination of these happenings has the potential to stimulate new ways of thinking and new approaches to pressures now exerted on American higher education.

This Research Report examines the issue of university reform. But in examining reform, one must look not only at the results but at the goals. Seven goals have been identified as being essential to the reform issues. These goals are: new university structures, interdisciplinarity, accountability, affirmative efficiency, relevance, democratization and participation, and increased responsiveness of the university to society. The countries that are reviewed in response to one or more of these goals are Japan, Federal Republic of Germany, Sweden, Great Britain, France, and India.

The author of this report is Philip G. Altbach, professor of higher education and social foundations of education, and director of the Comparative Education Center at the State University of New York at Buffalo. Through his many years of writing and teaching in the area of comparative education, and through his experience as editor of the *Comparative Education Review* and as the North American editor of *Higher Education*, an international quarterly, Dr. Altbach has been able to draw together the most significant literature concerning university reform. This analytic synthesis of university reform in other countries helps to broaden one's perspective in dealing with the same issues at home.

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Overview

University reform—the process of planned change in higher education—is a complex issue in many countries. This international perspective discusses some of the general issues related to the reform of higher education and then points to a number of examples of successful and unsuccessful reform efforts. By pointing to the experience of other countries, it is possible to highlight some key issues affecting higher education everywhere and to better inform American discussions of this issue.

Universities have changed dramatically in the period since World War II. Although the basic concerns of higher education have remained unaltered in terms of teaching, research, and service, the reality of expanded numbers and increased responsibility in a number of areas has placed immense pressure on universities. Institutions typically have dealt with these pressures by expansion and by unplanned change. In some instances, however, universities have consciously planned to meet external challenges and, in fewer cases, to institute change based on internally derived programs. Postwar reform can be seen largely as an effort to cope with expansion, with internal pressures such as student demands for participation in academic governance, and with external demands for higher education to take an ever larger role in complex societies.

The literature on theories of social change, innovation, and reform is immense and useful, but does not constitute the focus of this essay. We are, rather, concerned with illuminating the experience of other countries in coping with change and how the process of reform and innovation has worked in different national contexts.

It is clear that the process of reform is complicated and involves many different elements. Many reforms are, in fact, stimulated by external forces—the demands of government for a new academic program or the more subtle but nonetheless powerful pressure by the public for more access to higher education. In many instances reforms involve the expenditure of outside funds. Internally, the faculty is crucial to the success of any reform. It has the power to scuttle all but the most powerful plans. Historical tradition impinges on the reform process, often inhibiting rapid change. Students, in some countries, can stimulate reform and, in a few instances, have been instrumental in developing and implementing reform proposals.

In Sweden, the extensive university reform proposals developed and implemented by the government are among the most far-

reaching changes imposed on any university system. The Swedish example stresses governmental initiative and illustrates a common problem: the opposition of most academics. In West Germany, the reforms in some of the *lander* ("states") were due in part to the stimulus of expansion and to the discontent of students, who played a role in developing reform plans. The French efforts, stimulated by dramatic student dissent in 1968, radically decentralized the universities, but, according to most observers, did not dramatically improve either the standard of education or the morale of the academics. In the French case, as in Sweden, reform was forced on the university system from "above" as the result of government initiative. In Japan, student revolt and the enrollment expansion also led to a consideration of reform. In that country, it took the "big bang" of the student unrest of the 1960s to stimulate reform. Despite government pressure and the development of many plans, not much has changed in Japanese higher education. In India the case is also one of failure to change despite massive expansion and a general recognition of declining standards and of the irrelevance of much of the education system to India's economy.

These examples indicate the complexity of the reform process, but other examples may have some useful lessons for the United States. The German *Gesamthochschule* ("unified university") may serve as a model for the amalgamation of diverse postsecondary institutions. The British model of expansion, which was to expand the number of institutions but not to increase dramatically the size of individual universities, has proved successful. The Open University, which has pioneered a new model of higher education in England that has been widely imitated in other countries, is also a successful reform of relevance to American higher education.

Reform often has unanticipated results. For example, when the French built new universities, some of which focused on the social sciences, in the industrial suburbs around Paris, they also created a hotbed of student unrest. German efforts to widen participation in governance resulted in widespread demoralization of the senior faculty.

Reform plans also engender opposition. In many cases, the professoriate reacts unfavorably. Outside authorities are occasionally skeptical, particularly when increased expenditures are involved.

Despite problems, occasional failures, and unanticipated consequences, many nations have engaged in reform efforts that are interesting, significant, and even promising in terms of the improvement of higher education. Some are relevant directly to the American experience. A few are negative examples of how not to achieve change.

Theoretical Perspectives and Historical Directions

University reform perhaps can best be defined as the process of planned change in higher education. The term *reform* usually applies to change of a basic or structural nature: smaller alterations with more modest goals and implications are more properly labeled innovations. As a context within which to discuss the massive changes that higher education has undergone since the early 1960s, however, the concept of reform is limiting. Many postwar developments in higher education did not stem from purposeful reform or planned change but from accretion—the adding on of functions, institutes, or curricula without a clearly articulated plan —or simply from expansion. American higher education typically has developed without careful planning and often without regard for the long-term implications of change. Yet in a period of fiscal constraint, it is particularly important for higher education to consider carefully the implications of change and to engage in the process of planning before instituting major alterations. This essay will examine both the process of reform and the implications of various reforms in a number of national settings.

Theoretical perspectives

The literature on change in educational systems is immense (Paulston 1978; Dalin 1978). It is based on various theoretical perspectives from the social sciences. Political scientists argue that political variables are the key element, but sociologists look to the interaction of groups within educational institutions. Psychologists posit still other explanations. This essay does not deal with the theoretical literature on reform, but is concerned, rather, with understanding some of the underlying factors that have led to change and reform in higher education cross-nationally and with illustrating some examples of significant reform efforts, both successful and unsuccessful. Without question, it is necessary for scholars as well as policy makers to understand some of the important theoretical perspectives if they wish to understand what is undeniably a complex process. However, such an analysis is beyond our scope.

University reform is a value-laden concept. What is a reform to an educational planner or an economist may be a regressive step to a student activist or an educational philosopher; what is a dramatic reform in one country may be established policy in another. What may be considered innovative one year may be irrelevant the next.

For example, the debate in the United States concerning the reform of the undergraduate curriculum through "general education" may be seen as simply reestablishing a curricular pattern of a previous period, as an innovative step, or as a conservative reaction to the reforms of the 1960s. The concern here, however, is not with evaluating specific reforms but with examining instances of planned change regardless of the sentiments of the various segments of the academic community.

University reform is not only a matter of concern to academic institutions and communities, but often has an important external element. Indeed, as will be seen, external authorities, usually governmental in nature, have been responsible for stimulating most major reforms, often encountering academic opposition in the process. Crisis, in the universities and in society, often plays a significant role in stimulating reforms. As Kitamura and Cummings (1972) have put it, the "big bang" is often a necessary precursor for reform. It is, therefore, important to examine both the internal and the external aspects of both the origins and implementation of reform.

Academic institutions are, in some respects, anarchic entities, seldom able to agree on a particular course of action. Even when agreement is obtained, consensus is often the result of compromise. The lack of internal agreement on change makes universities especially vulnerable to pressure from without. Consequently, any examination of university reform must consider such forces as government, the business community, political parties, and public opinion that exert pressure on the university in many directions.

Moreover, the scope of university reform is not limited by national boundaries. University reform must, therefore, be viewed from an international perspective. The university is part of an international intellectual community and cross-cultural influences are very important to the process of university reform (Altbach 1980). Universities in one country often are championed as appropriate models for reform in another country by various political and social forces and sometimes by academic forces. For example, the widespread influence of the reformed German research-oriented university of the late 19th century and later of the American land-grant model of university service to society had widespread international ramifications (Ben-David and Zloczower 1962). In recent years, the American model has been widely imitated abroad, in part because of the leading role of American higher education in research internationally and in part because the United States faced the challenge of mass and then universal access to higher education first and developed institutional means of dealing with large numbers of students (Trow 1974).

Finally, one must examine not only the pressures for reform but also the process of implementing reforms within the university. When change is imposed from outside, it often has less effect than intended or is considerably modified during implementation. Reforms designed within the university community itself are often subject to compromise by various groups in the university before consensus can be achieved. Thus, the process of reform often limits the results of reform.

Historical and cross-cultural directions

Universities have a long historical tradition and a sense of continuity over time. This historical consciousness separates them from many other social institutions and affects higher education's self-image as well as its perceived role in society. By and large, the traditional image of the university is embodied in the faculty, and it is typically resistent to reform. Historical consciousness protects universities from ill-advised change or sometimes from undue outside interference, but at the same time this consciousness makes them difficult to reform (Shils 1974).

Virtually all the modern world's universities are based on the Western model, which can be traced to the medieval universities of Paris (the dominant model organized by the faculty) and Bologna (developed by the students). Oxford and Cambridge, later developments of the medieval models, were the prototypes for North American institutions, and the 19th-century German university served as the basis for graduate education in the United States, Japan, and the rest of Europe. Even the universities of the Third World are almost exclusively Western in origin—either imposed by colonialism or freely adopted in the struggle for modernization (Ashby 1966). The modern American university, in turn, is a model for new institutions in the Third World as well as for reform efforts in Western Europe.

The "idea of the university" has changed dramatically over time, generally as a process of evolution. The original definition of the university did not include research, graduate training, or the myriad other functions now accepted as integral to an academic institution. The early university was largely a professional school for law, religion, and medicine, with an overlay of what has come to be known as the liberal arts (Haskins 1965). Early universities reflected the feudal cultures of which they were a part and were seen as transmitters of an existing culture rather than creators of new knowledge. Nevertheless, universities from the beginning were repositories of expertise and were called on to provide advice and interpretation to authorities, both ecclesiastical and secular.

Early universities also were buffeted by internal and external pressures and, in a sense, the "ivory tower" never existed. For example, part of the reason for the decline of the student-oriented Bologna academic model was the instability of the institution due, in part, to the rapid changes demanded by the students.

It can be argued that universities, through much of their history, followed rather than stimulated societal change and often were not in the vanguard of intellectual growth. French universities were neither instrumental in the intellectual and political ferment that led to the Revolution nor in the remarkable development of culture that contributed to French leadership in Europe in the 18th century. In fact, the French universities were ordered closed soon after the Revolution. British universities played only a minor role in the technological innovations that led to the Industrial Revolution. Indeed, British higher education joined the modern era only in the late 19th and early 20th centuries as a result of reforms that emphasized technological and scientific pursuits (Sanderson 1975).

In Germany, on the other hand, which came to industrialization later than Britain, the government encouraged the universities to assist in creating the intellectual basis for a unified German nation and to provide a scientific base for Germany's impressive industrial and technological development in the 19th century. Germany's position was unique at the time and had some important lessons for later development of higher education in other countries. In a sense, Germany was a "developing nation," newly unified and searching for ways to move rapidly into the position of a world power. Higher education came to be seen as a contributing factor —in terms of building an intellectual base for German nationalism and of providing scientific knowledge (Ben-David and Zloczower 1962). The stimulus for the reform of German higher education in the 19th century was supported by the academic community. The German universities were so successful that they became models for other countries, including the United States with its growing university system.

Because the German reforms were so important, it is worthwhile to briefly outline some of them. German academics became state civil servants, and the links, in many ways, between the university and the state grew strong. Research was emphasized as a part of the mission of the university, and the government provided funds to conduct research, both basic and applied. Knowledge was divided into academic disciplines, and this led first to the "chair" system and then to its American variant, the academic department. The university curriculum was broadened to include new fields, particularly in the sciences. The German university became part of a developing economy and moved beyond its traditional role as edu-

cator of a narrowly defined elite and preserver of an established culture.

The United States and Japan were especially attracted to the German model and in the late 19th and early 20th centuries, borrowed many elements of German higher education—chiefly, the concept of graduate education, the division of academe into disciplinary specialties, and the emphasis on research and scientific advancement (Veysey 1965; Nagai 1971). The Americans, as relative latecomers to the Industrial Revolution, were attracted to the German model for many of the same reasons that the Germans developed it: the need to train skilled manpower quickly for a rapidly expanding industrial and bureaucratic system; the need to develop a coherent culture as the basis for national unity, and the need to translate a rapidly advancing technology into terms that would be useful for development. The United States innovated further. Decentralization, the development of the land-grant colleges, and the expansion of liberal studies and professional and scientific training within the university all were reforms that extended the German idea of the university. The American university went further than the German in stressing the "practical" application of knowledge, particularly in agriculture, and managed to graft the traditional undergraduate liberal arts college, which stemmed from the British model, to the new academic ideal.

The Japanese case is also a significant example of massive reform, although the Japanese model has not been explicitly followed elsewhere. In the 19th century, when Japan decided to modernize along Western industrial lines, it quickly recognized the importance of an effective university system in assisting with modernization plans. The Japanese turned to Germany for an academic model and for technical expertise. The university was a key element in the modernization of Japan and was one of the major "windows" to the outside world. In the aftermath of Japan's defeat in World War II, the United States became the primary model for a rapid expansion of higher education. Thus, the modern Japanese university shows the results of considerable reform based on foreign models (Cummings, Amano, and Kitamura 1979).

In the period following World War II, Third World countries have attempted to build academic institutions to serve their own needs. In virtually all cases the original model has been a Western, often a colonial, institution. This choice of model has made the process of adaptation more difficult, since the Western-style university has few roots in most Third World societies. These countries, following in the American and Japanese patterns, see higher education as a critical tool for modernization and development and have attempted to build these capabilities into their universities.

While major national variations in higher education exist, it is possible to see important common roots in higher education. At least for the past century, the international trend has been to see postsecondary education as an important social institution capable of assisting in the tasks of development. It is important to keep in mind the university's historical traditions as well as its recent history when considering the goals and directions of reform.

The Reform Process

Pressures for reform

If the societal need for modernization and technology stimulated many of the reforms of the past century, another related but different series of pressures has motivated more recent reforms. The main thrust of higher education in most of the world has been expansion, and this has motivated much of the change—planned as well as unplanned—that has occurred in the post-World War II era.

As social needs for new technologies increased in the 19th century, the university became a training ground for many professional and scientific pursuits rather than an enclave for the humanities and such professions as law and the clergy (Kerr 1963) Universities also became "screening" institutions for those judged to have the potential to attain key positions—they became gatekeepers for meritocratic societies. Very recently, an opposite trend has developed in many societies—the demand that higher education assist in providing social mobility to disadvantaged groups in the population. Without question, universities have moved to a central position in most societies, and along with this centrality have come increased responsibilities, increased scrutiny by a variety of agencies, and pressures from many sources.

Many of the changes that have occurred were not planned but, by altering the role of the university in society, these changes have expanded the role of higher education. For example, since universities train for a range of occupations requiring advanced educational qualifications crucial to a technological society, they have become an important element in providing social mobility for growing sectors of the population. Both the expanded training and selection functions of higher education are evident in countries of widely divergent social and economic circumstances; the United States, Western Europe, and the socialist countries of Eastern Europe rely on higher education for selecting their elites (Onushkin 1971); Third World nations increasingly are relying on higher education to perform this role as well.

Many groups have been eager to exert pressure for reform to achieve their own ends and goals. In Third World nations, the politically powerful educated middle classes have demanded expansion of higher education as a means of opening up careers. In the United States, disadvantaged groups have applied pressure for

access to higher education. Moreover, as universities become more crucial to national life and require ever larger amounts of money, governmental and other funding agencies demand accountability, press for new programs, and take a greater role in setting institutional goals and policies. The pressures from the political system, directly through government intervention and indirectly through public opinion, have been tied to the expanded role of higher education.

Students also have been a source of pressure for reform and change in higher education, although in many cases their role is difficult to evaluate. Student pressures go far beyond the highly publicized demands of the activist student movements of the 1960s. In Latin America, students had a key role in changing the pattern of university governance since 1918, when students were included as participants in many academic decisions (Walter 1968). Latin American students later turned their attention to societal issues and have played a revolutionary role in many nations. In a few nations, most notably West Germany, student activists put forward a program for university reform that had an impact on the plans that were implemented (Nitsch et al. 1965). In France, Japan, Italy, and, to a lesser extent the United States, students were important in pressing for reforms, but played only a limited role in determining the nature of the reforms that were implemented. By engaging in activist movements, students have brought attention to particular elements of crisis in higher education. Students also have had an impact through their choice of universities or subject matter, by their attitudes toward education, and by their enrollment rates. The current downturn in enrollment in many countries, due in part to changes in demography, also results from changing preferences among young people. Demands by particular groups of students, such as women and racial minorities in the United States, also have had an impact on institutional direction and policy.

Demands for new technologies, increased numbers of highly skilled individuals, and similar pressures have placed strains on the traditional curriculum. During the 1960s, demands for "relevance" were common in many nations. Recently, students as well as nonuniversity groups have demanded that the curriculum be changed to include more vocational and scientific subjects (Carnegie Commission on Higher Education 1973; Ministry of Education, Government of India 1966). Universities have responded by adding to the curriculum, cutting required courses and subjects, and upgrading technological institutions to university status. As Abraham Flexner (1930) pointed out half a century ago, institutions of higher education have expanded their scope, first in the United States, to meet the technological and credentialing demands of complex societies.

The most critical contemporary force pressing on universities is what Martin Trow (1974) has called the shift from elite to mass (and finally, to universal) higher education. The United States and Japan are most dramatically nearing the stage of universal higher education; about half their relevant age groups attend postsecondary education institutions (Bowman and Anderson 1974; Bereday 1973). Several European countries expanded universities and postsecondary institutions rapidly during the 1960s and are now at the stage of mass higher education. India and the Philippines are the best examples of Third World nations that have seen rapid expansion of university systems; both are faced with special problems of widespread unemployment of graduates and misallocation of resources (Singh and Altbach 1974). The phenomenon of rapid growth is worldwide, and few countries have escaped its effects. Some, such as African nations that came quite late to higher education, are still in the very early stages of the growth curve; a number of industrially advanced countries in Western Europe and North America have reached the top of the curve and now are coping with what has been called the "steady state" (Carnegie Foundation 1975). These latter countries face static or modest declines in enrollments in the coming decades. But even in countries that have stopped expanding, the dominant reality of the past 20 years has been expansion and its implications.

The implications of rapid expansion for institutions of higher education, although dramatic, very often have been unanticipated. In many instances, when decisions are made to expand enrollments, little consideration is given to many of the potential results of expansion. Not only do enrollments grow but the social class base from which university students traditionally are drawn also expands, and the consensus concerning the nature and purpose of higher education disappears. The "new" students tend to be more vocationally oriented and to choose applied fields of study rather than subjects in the traditional curriculum. The academic profession grows rapidly, and many faculty members—particularly younger ones—have not been socialized into traditional academic norms and values. Institutional governance becomes more difficult as universities grow to 30,000 students. Facilities, such as libraries, laboratories, and dormitories are taxed beyond capacity. A professional administrative cadre inevitably emerges, and academic institutions become bureaucratized. In sum, expansion challenges the traditional concept of the university.

Reform is simultaneously an internal and external matter. While the impetus for reform comes largely from external sources, the process of reform itself must, for the most part, be handled by the university itself. Only those directly involved in the academic

enterprise can translate social demands into educational programs and administrative forms. Even the various government-appointed commissions set up to examine higher education and outline broad programs for reform have included a significant number of academics in their ranks. Because reform is both internal and external in nature, it is often difficult to get those on both sides of the equation to agree on common objectives and tactics. The process of implementation often causes the greatest problems: the academic community generally seeks to keep change within the parameters of the traditional roles of universities, but public authorities may exert pressure to solve social or technological problems quickly, often without regard for the broader functions and traditions of higher education.

The pressures for change in higher education have been immense during the past several decades. There has been considerable pressure on the curriculum—from demands for new subjects to serve technological developments to demands from students for more "relevance." Traditional structures of governance have proved unable to meet these demands, and, thus, pressures for new structures of governance have been felt (Epstein 1974; Mason 1975-76).

Obstacles to reform

With all the powerful forces pressing for reform and change in higher education, one might ask why universities have changed so little. The answer may lie in the very organization and tradition of the university. Both the traditional function of the university as the custodian of culture and the jealously guarded autonomy of the faculty make change difficult. Historical consciousness, mentioned earlier, is another barrier to institutional change. The traditional role of universities has been to transmit an established culture rather than engage in research and innovation—the research enterprise began only in the 19th century. This stress on established values has inhibited reform.

The faculty, as a key defender of the traditions of the university, is also an important conservative element. Socialized into particular academic roles and benefiting (at least at the senior levels) from considerable power and prestige within the institutions, the faculty has not been eager to innovate. Professors often see reform as a threat to their own power—and they are often correct in this assumption. Their image of the university as a place for scholarly inquiry and reflection differs from emerging concepts of the role of higher education as an active participant in society (Ladd and Lipset 1975). The faculty feels most strongly about the concept of

university autonomy—the ability of the university to function and to set policy without outside interference—and reform proposals often are seen as a threat to this autonomy. Autonomy also is seen to be related to prestige and professionalism: as autonomy is threatened, many in the academic community feel that their professionalism is also in jeopardy.

While it is possible, and indeed not uncommon, for reform plans to be developed and promulgated without the support of the faculty, it is difficult to ensure the success of a reform effort without faculty support. In many instances, the faculty has been able to delay or compromise reform plans that it opposes.

Another key variable in the reform equation is funding: reform is often costly. Innovative programs tend to require not only alterations in the curriculum but also additional staff or equipment. Major reforms, such as the establishment of new universities, require the expenditure of large sums of money. Even reforms that deal only with the restructuring of existing institutions or programs inevitably require funding. In addition, the "hidden cost" of reform is often considerable—costs resulting from disruptions in university procedures, confusion, delays, and the like. Reforms often are developed without regard for the full cost involved, and when the budgetary implications are considered, idealistic and innovative programs may be scaled down considerably. Thus, financial considerations frequently curtail or even eliminate well-developed reform programs.

Substantial change is almost always controversial, and controversy breeds resistance, debate, and often compromise. In addition to faculty opposition to aspects of a reform and government resistance to high costs, the reforms themselves may be politically inexpedient. Ministries of education, for example, may fear that their power is being eroded by reforms permitting increased local control. Government officials may be reluctant to allow substantial student participation in academic governance because of possible radicalism among student representatives. Administrators within universities may not wish to lose their own power or prerogatives in a reform program. Governments may feel that proposed reforms do not guarantee sufficient accountability from the universities, and faculty members may feel that the same reforms erode the traditional concepts of university autonomy and, perhaps, even academic freedom.

Obstacles to reform come from many sources. Lack of understanding of the nature of a reform proposal may engender opposition from one of the relevant constituencies. The development and implementation of reform is inevitably a political process, and the involvement of so many groups leads to confusion, compromise,

and opposition. The constituencies may have diametrically opposed points of view. Government authorities want change but also desire economy. Students have their own interests, which in some cases are expressed politically with a great deal of vehemence. In addition, their view of the appropriate curriculum or governance structure is often at odds with that of the faculty. Although the public is seldom directly involved in reform plans, newspapers, commentators, and others occasionally can have an impact. The history of reform is full of examples of compromise because of opposition from one or more of the relevant reference groups in the reform process (Hefferlin 1969). Reform at its base is a combination of political process with academic goals and interests. The two are often confused, and the inevitable result is compromise. Compromise, however, may be the only way a diverse institution such as a university can reach any decision, even if the result is not fully acceptable to all groups.

The process of reform

It is difficult to chart the course of university reform in any general way because each situation is different, with its own political and academic realities. National differences are marked. Political scientists and others have tried to analyze the general configurations of the decision making processes in higher education (Baldridge 1971). While these generalizations are useful in considering theories of change, they are not very helpful in explaining the process of university reform in comparative perspective. Our purpose here is to illustrate some of the ways different nations have dealt with the process of reform, once it has been determined that substantial change is required. No general theories are posited. There is, instead, an emphasis on illuminating various approaches to reform in different academic settings.

In a decentralized academic system like that of the United States, changes may be proposed in a general way at the national level (Carnegie Commission on Higher Education 1973) but must be implemented at the state or local levels. Federal funding for specific projects helps, of course, but here, too, policy implementation occurs at lower levels. Although the examples in this essay do not concern the United States, it is possible to see elements of the American experience in many other countries.

The nature of the organization of the educational system is basic to our understanding of the reform process. In highly centralized systems, such as Japan, Italy, or Sweden, the national government has a key role in determining the nature of reforms and in determining the means for their implementation, although local co-

operation also is required (Driver 1972b). In federal systems, like West Germany, India, Canada, and, of course, the United States, state governments have the primary governmental role. In a few instances, most notably Britain, where the University Grants Committee has played an intermediary role between the government and academic institutions, there is a further layer of authority (Berdahl 1959). Thus, the nature of the political system, the tradition of relationships between higher education and government, and the formal lines of authority and governance between higher education and public control all play a role in the reform process.

Differences in academic organization also influence the nature of the reform process. In academic systems that have a strong administrative apparatus, as is typical in the United States and increasingly the case in other countries, the administrative hierarchy plays a key role and can stimulate reform. Although the academic organization of higher education in the socialist nations of Eastern Europe remains fairly traditional, there is no question that governmental authorities have more power than is the case in Western Europe. In short, the locus of power in the academic system is a key element in the question (Clark and Youn 1976).

The first step in the reform process is identifying problems requiring change. Some problems—such as severe overcrowding or the production of graduates in fields where there are no jobs—are self-defining but often not amenable to reform. Others, such as estimating future enrollment trends from population projections, determining the proportions of the age groups expected to demand higher education, and adjusting the universities to meet these expected trends, are more subtle and take more time. Dramatic events, such as a mass student demonstration, a strike by the faculty, or a fiscal crisis, will quickly identify problems that have gone for years without action. Indeed, as Kitamura and Cummings (1972), state in the Japanese context, it often takes a "big bang" to awaken sufficient interest or consciousness to deal with a passing academic problem.

Once problems are identified, mechanisms must be set up to find workable solutions. One of the most common means of arriving at solutions in academe is the ubiquitious committee system. Often an ad hoc committee is set up to study a problem and recommend solutions. While such committees may be internal to the university, they often include government officials and private citizens. Committee structures range from modest informal arrangements to well-funded full-scale efforts with high-level membership and research staff. The Carnegie Commission on Higher Education in the United States and the Education Commission (1964-1966) in India are good examples of large-scale enterprises

that produced massive reports and a large number of recommendations, only a small portion of which were implemented. Typically, committees merely report their findings and leave the implementation to others. Committee recommendations range from broad policy guidelines to quite specific proposals for detailed changes and suggestions relative to the cost of such reforms and the means by which they might be implemented. Committee structures are, of course, prone to compromise and consensus and committees seldom present utopian recommendations. Deliberations often are time consuming and in many instances the impetus for change is considerably blunted by the time the report is made. In Japan, for example, the massive university disruptions of the 1960s led to the establishment of many reform committees, but by the time the reports were issued, the thrust for change had disappeared and relatively little was done (Cummings 1974).

Committees, although probably the most common means of generating reform proposals, are not the only means available. Charismatic leaders occasionally propose changes that are influential. Wilhelm von Humboldt in Germany, Robert M. Hutchins in the United States, Arinori Mori in Japan, and a few others come to mind. Perhaps significantly, such persons were often successful in the past, but no such charismatic educational leaders have emerged in the current period. It is perhaps significant that such influential educators as Clark Kerr in the United States, Eric Ashby in England (and the Commonwealth) and Lord Robbins in England all have been members of committees. No philosophers of higher education of the importance of Ortega y Gasset or John Henry Newman are evident in the post-World War II period. Nevertheless, it is possible for individual initiative to play a significant role in the development of reforms, and it is likely that one could locate examples of such leadership in single universities.

Government fiat has played a key, if controversial, role in the development and implementation of university reform. Crisis in the academy often stimulates widespread public and governmental interest and sometimes results in the government providing direction for change and reform in individual universities or in the academic system. The French student agitation of 1968 resulted in the acceleration and expansion of a reform that has been discussed previously (Cohen 1978). Government policy in Britain mandated the expansion of universities, and this resulted in the creation of new universities and in other changes. Once the general direction of policy was articulated, however, the nature of the expansion was left to the universities and to such bodies as the University Grants Committee. In Japan, as indicated earlier, the "big bang" of university crisis stimulated governmental concern. In the centrally

planned societies of Eastern Europe, the government is integrally involved in the process of reform and academic policy at all levels. Thus, it is common to have the government involved at all stages of the reform process. Typically, government involvement is stimulated by crisis or by clearly articulated public policy that the government wishes to see implemented. And, of course, funding from governmental sources is integral to the process of reform in most instances.

Once a reform has been determined, the next and in many ways most difficult part of the process is that of implementation. Implementation can be accomplished by committee, administrative fiat, or by other means. It is difficult to generalize about the implementation process because it varies so greatly and is handled at a number of different levels of the academic system. It is at the level of implementation that compromises often transform what is a clear mandate for reform into a result that may be far removed from the one envisaged by the planners and reformers. Faculty, administrators, and sometimes students are all involved in the implementation process. Local political forces also may have an impact (Cerych 1979). The process of implementation often produces both conflict and compromise among the many forces affected by the contemplated change. Even in the most rigidly planned academic and political systems, the interplay of forces at the stage of implementation can be dramatic. It is, therefore, not surprising that carefully formulated academic plans sometimes lose much of their impact when finally put into operation. The problem of implementation is not confined to higher education. As Cerych (1979) points out, 50 percent of the laws passed by the French Parliament in 1973 had not begun to be implemented in 1976.

One of the easiest ways of effecting academic change is by starting entirely new institutions that incorporate some new ideas about higher education. This method circumvents the process of compromise at the local level that characterizes other kinds of reform and generally does not threaten established institutions or interests. New universities have been founded for this reason in many countries including the United States, Japan, Britain, and West Germany (Cummings 1974; Perkin 1969; Boning and Roeloffs 1970). In many nations, academic institutions with very different goals, governance processes, and orientations exist side by side. Indeed, this has been the typical American pattern of change. In most cases, new institutions were established to implement a reform. It was not surprising that the idea of the graduate school was first implemented at new institutions such as Johns Hopkins and Stanford rather than at the established universities (Ben-David 1977).

These new institutions may or may not have an effect on the rest of the academic system. The American academic system, for example, features a wide range of different types of postsecondary institutions, many founded by local initiative to provide an alternative to established practice (Ashby 1971; Carnegie Commission on Higher Education 1972). However, as David Riesman (1958) has pointed out, there is a clear hierarchy among academic institutions in the United States, and the Harvards and Yales dominate the system. Similarly, in England Oxford and Cambridge continue to set the tone for the academic system despite the existence of a number of newer models of higher education, including the innovative Open University.

There is a range of methods for implementing reform in higher education, but if international experience is any guide, implementation is generally the least scientific, and often the least successful, aspect of the process of reform. In general, compromise is involved, and the interests of diverse elements of the academic community are involved in the process. Since reform is often foisted on academic institutions from the outside, it is not surprising that the internal groups charged with implementation are less than enthusiastic about their tasks.

Reform goals

Some of the more important goals sought by reform programs in the period from 1965 to 1980 include the following:

- New university structures
- Interdisciplinarity
- Accountability
- Administrative efficiency
- Relevance of the curriculum
- Democratization and participation of the internal governance of institutions
- Increased responsiveness of the university to society

Although this list is by no means complete, it does indicate the extent to which reforms are the result of the kinds of pressures on higher education that were outlined earlier in this essay. Many of these goals stem directly from the expansion of the past several decades and the opening of postsecondary education to a wider social-class base. It is useful to discuss briefly each of these broad goals to understand the direction of major reforms in international perspective.

New university structures. In order to handle growing numbers of students and new academic tasks, universities have tried to develop new structures. These new structures have included plans to alter existing universities, but more often have focused on entirely new academic institutions based on different ideas of organization and function. In West Germany, the concept of the *Gesamthochschule*, or unified university, has been an effort to upgrade technological institutions and provide a new organizational structure to permit a wider range of curricula in universities (International Association of Universities 1972; Draheim 1973). Other countries also have begun to restructure their postsecondary education systems to give university status to technological institutions, teacher training colleges, and other higher education institutions. Britain, for example, has moved in this direction not only by upgrading technical institutes but also by establishing the Council for National Academic Awards, a body with the power to grant degrees and supervise standards in the newly "upgraded" institutions.

A different approach, based on Britain's Open University, establishes new educational opportunities for students who want university training degrees but, for various reasons, cannot participate in conventional classroom activities. An entirely new institutional structure has been devised, based on the use of television combined with periodic discussions with a mentor. In the United States, "nontraditional" academic programs of various kinds also utilize new structures. In Latin America, private universities have been established to provide alternatives to traditional public institutions.

On a worldwide scale, the number of new institutional structures is quite substantial. Without question, this is one of the most widely used means of reforming higher education and permitting it to serve new needs.

Interdisciplinarity. Traditional academic disciplines have been considered stumbling blocks to the advancement of knowledge in a period of rapid technological change and tremendous growth of scientific information. Criticism has focused on the organization of universities into traditional and often conservative departments. Even more attacks have been leveled at the "chair" system that has been the dominant organizational mode in such countries as Japan and West Germany. The effort has been to break down the often impermeable walls between academic departments and, hence, between disciplines in order to permit insights from one academic field to cross-fertilize with other fields. In addition, it has been felt that the traditional academic departmental or "chair" organization inhibits innovation at a number of levels, and this has been a motive for attempting to alter or eliminate the departmental system.

In an effort to force change in the traditional disciplinary and faculty organization, postsecondary educational institutions in a number of countries have created interdisciplinary structures and orientations. In the Federal Republic of Germany, the *Gesamthochschule* has been an effort to combine various types of postsecondary institutions into a single university-level structure and to encourage these segments to work cooperatively. In both France and Germany, the concept of interdisciplinary teaching and research groups has been an integral part of reform plans. The French UERs (*unités d'enseignement et de recherche*—units of teaching and research) have, in the universities where they have been established, set up distinctive interdisciplinary centers that combine various disciplines and apply them to specific problems and concerns (Cohen 1978). There is a good deal of controversy concerning the success of these innovations, but they are now an established part of the French academic scene. Similar innovations have been developed in West Germany, particularly at the new "reformed" universities, such as Bremen and Oldenburg. In France and West Germany, such interdisciplinary arrangements have been part of basic reform in the structure of the university. In other countries, such as the United States, there have been efforts to encourage interdisciplinary research and teaching through the establishment of centers and institutes or by the creation of ad hoc committees. Occasionally, these mechanisms have been able to grant degrees but they rarely have had any major effect on the traditional structure of the university.

Interdisciplinarity has been one of the key issues in higher education reform in a number of European countries, particularly in those countries that had rigid and traditional modes of academic organization. Interdisciplinarity has been accomplished through radical restructuring of higher education as well as through much more modest reforms. With some exceptions, however, the bonds of the established academic disciplines have remained strong, and the achievement of institution-wide interdisciplinary cooperation has been rare.

Accountability. One of the most controversial concepts in contemporary debates on higher education, accountability subsumes a series of concerns for making higher education programs more understandable and often more controllable by public authority. As universities have expanded, have taken on more key social functions, and in general have become key societal institutions, governments have demanded increased knowledge of what occurs in higher education institutions and often have demanded control over basic directions (Sibley 1977). In debates on higher education,

accountability is often counterposed to the basic concept of autonomy, the traditional norm that academic institutions have control of their internal affairs and their basic goals (Mortimer 1972). Accountability does not necessarily mean centralization, but in most cases it has resulted in increased government involvement in academic affairs, since accountability for funds almost inevitably means accountability for programs as well. The new French approach to systemwide university reform stresses accountability for funds and for broad policy matters but allows for decentalization of local academic decision making. However, this approach is rare and it is unclear how it will work in the face of an increasingly difficult fiscal situation. Even such mechanisms as the British University Grants Committee, which traditionally has insulated British universities from government control, has been under criticism as the government, facing severe financial pressures, has tried to exercise more direct authority over academic programs and developments. Increasingly sophisticated computer-based sources of data control have assisted in making financial accountability possible in academic systems that were previously thought too complex for detailed fiscal management.

Accountability is not seen by the university community as a reform but rather as an unjustified interference in traditional academic autonomy and as a danger to the long-term effectiveness of higher education. Yet, it is one of the major pressures for change in higher education in recent years and has been gaining ground in many nations. The means of accountability differ from country to country, but generally involve the use of sophisticated data-retrival techniques to keep abreast of expenditures, the development of institutional research as a means of understanding the actual performance of academic programs, and the linking of academic goals and programs to the funds provided them as an effort to measure "productivity" in fiscal terms. These ideas are controversial in the higher education community, but nevertheless are key elements of governmentally inspired efforts to change higher education.

Administrative efficiency. Not usually viewed in the same vein as a curricular change or as increased student participation in governance, the trend toward administrative efficiency in higher education is one of the currents of the recent period and certainly can be viewed as a reform. Related to accountability, administrative efficiency is part of a trend to provide management appropriate to large and complex institutions. Many of the other reforms indicated in this essay, such as increased participation of students and

others in academic governance, have necessitated more complex administrative apparatus. The dramatic growth of universities and the ever-increasing budgets also made more complex administrative arrangements inevitable. Although not very dramatic, new management and administrative procedures in universities can be considered as a reform.

Modern management techniques increasingly have been used to replace the anarchic and often unwieldly administrative structures that have served universities for long periods. Moreover, in many countries, administrators have assumed increased power over the direction of universities. Technical innovations such as Program Planning Budgeting Systems (PPBS) are aimed at making units of the university account for the expenditure of funds and resources. In addition, there have been efforts to try to quantify and measure the effectiveness of various academic programs, including teaching. Although such efforts have engendered a great deal of controversy where they have been attempted, they continue in many countries.

The general trend is toward increased administrative control in order to ensure a more rational operation of what have become modern bureaucratic structures rather than communities of scholars separated by tradition from the mainstream of society. Although many would debate whether administrative efficiency constitutes a reform in the normally accepted use of that term, there is no doubt that such trends constitute planned change within postsecondary institutions. Indeed, it is likely that such efforts are probably a more important tendency in the emerging higher education institutions of the 1980s than the more publicized curricular reforms. The United States has been the leader in attempting to rationalize academic administration, in part because American universities expanded earlier than those in most other countries. Now, however, the nations of the European Community and Japan are moving in this direction and might be in a position to provide some guidance to American policy makers in the coming years.

Relevance. Relevance has many definitions. What is relevant to an activist student leader concerned with radical social change is different from the definition of a corporate executive interested in skilled managers from the business school. Yet, demands for relevance were heard from many quarters during the 1960s and continue, though muted, to the present time. There has been a general agreement that the traditional academic curriculum was no longer in tune with the needs of complex industrial societies and that changes needed to be made. Only the faculty defended the traditional curriculum, and in many countries including the United States, even it has not been very strong in its defense. As the uni-

versity itself shifted from serving a small, elite population destined for a limited number of professions to training large numbers for a much broader range of occupations, the traditional curriculum was seen as too limited—it became "irrelevant."

Historical tradition, the lack of a developed alternative, the commitment of some faculty members, and other factors kept the traditional curriculum alive, and, indeed, it remains strong in many nations and in many institutions. But the pressure to change came from many quarters, and considerable change in the curriculum in the direction of relevance has taken place. In general, universities have become more "vocational" in their orientations, and, since the 1970s, students in many nations have chosen vocational and professional options within the established university offerings. In many nations, traditional courses or subjects were dropped from the required curriculum, and as a result the academic offerings of the university became more like a smorgasbord of optional choices than a coherent curriculum.

Many academics now see that the trend toward a loosely defined relevance has gone too far, and there are moves in nations as diverse as the United States, the Netherlands, and France to reestablish some of the traditional norms or develop a new coherence to the structure of academic offerings. But the overall thrust toward the involvement of the university in training for a range of applied fields is established and will not disappear. Relevance, as a rallying cry of the turbulent '60s, may be muted, but the thrust remains a key element in most academic systems.

Democratization and participation. The 1960s brought a worldwide protest against the academic aristocracy—the academic "Mandarins," or, as the Italians put it, the "barons" (Martinotti and Giasanti 1977). The senior professors, particularly in Europe and Japan, have completely dominated the decision-making structures of universities for centuries. The roots of the revolt against the academic aristocracy lay, in part, in the expansion of higher education, which created a group of powerless academic staff between the professors and the students, as well as greatly enlarged the student population with individuals who had no commitment to the traditional concept of the university. In many countries, the senior faculty was unable to provide adequate education to the expanded numbers (Clark 1977). As a result, a significant part of the protest movement of the 1960s in Europe was aimed against the domination of the senior faculty and toward a democratization of higher education at all levels.

Many of the reforms that have been implemented provide for increased democratization and participation in the governance of

the university by various elements of the academic community. As a general rule, the once absolute power of the senior professors has been limited, even concerning such matters as curriculum, and, in some countries, the examination of students and the setting of degree requirements.

This trend has gone farthest in the Federal Republic of Germany, where the concept of *drittelparität* (tripartite governance) includes students and university employees in the governance process at all levels, in more or less equal numbers to the senior faculty (Nitsch et al. 1965). Despite recent limits on the nature of *drittelparität* imposed by the courts, the concept is an integral part of the recent reforms. France, the Netherlands, and Sweden also have provided for some participation in governance by students and nonprofessorial staff. Britain and the United States, along with most Third World universities (except for Latin America) (Walter 1968), despite some pressure, have not moved significantly toward increased democratization of the universities. Although most countries have not gone as far as West Germany in enlarging the range of participation at all levels of academic decision making, the issue of democratization has been an important one throughout the world and particularly in Western Europe.

Without question, the professoriate has been under attack in most countries (Altbach 1977a). Trends toward democratization have weakened the traditional power of the faculty, and accountability has further eroded its power. Rapid expansion has increased the size of the faculty and, at the same time, has diminished its sense of cohesion. The senior faculty has lost some of its power in governance and has probably suffered some decline in social prestige. The trend toward participation has, without question, been opposed by the senior academics and has adversely affected them.

Increased responsiveness of the university to society. In general, academic systems and individual universities have moved closer to their societies. To a considerable degree, this relationship has evolved through expansion and increased funding for higher education. Academic institutions, in most countries, have been willing to abandon some of their autonomy for the increased funding, power, and prestige brought by the new trends (Nisbet 1971). Although much of this increased responsiveness has been more a matter of evolution than of conscious policy and direction and, thus, does not fall under our definition of reform, it has also, in part, been related to a conscious effort to link universities more directly with societal concerns. Indeed, many of the categories of reform discussed in this section, such as relevance and participa-

tion, are linked to the increased responsiveness of the university to society. The vocationalization of the curriculum, the adding on of new applied areas as part of the curriculum, and the stressing of applied and socially and technologically relevant research also are linked to this trend. In the Third World, where the needs of development are particularly acute, there has been a greater stress on linking universities to society (Thompson and Fogel 1976).

In addition to the broad categories of changes indicated in this section, a large number of somewhat unclassifiable reforms have altered the nature of the academic enterprise. For example, a rearrangement of the lockstep of academic degree programs has been attempted in many countries. Cooperative education and "sandwich" courses that alternate academic work with on-the-job experience have proved successful in the United States and Great Britain and are being introduced elsewhere. The Chinese practice, now apparently in disfavor, of combining academic work with practical training is another trend in this direction (Shirk 1979). In the United States, the Carnegie Commission on Higher Education (1973) has recommended shortening degree programs and allowing students to "stop out" for varying periods of time. New two-year degrees in community colleges in the United States and short-cycle higher education in various European countries illustrate another effort to provide postsecondary alternatives to the traditional universities.

This discussion of the goals of reforms has concentrated on some broad categories that seem to be applicable in many different countries. These goals are, in a sense, part of an international movement toward university reform. Many other reform goals can be identified in particular countries or in individual universities. And, as indicated earlier, there are many tactics used in the achievement of reform. With this general introduction, it is possible to move to a detailed discussion of some relevant reforms that have been proposed and implemented in different nations.

Models of Reform

This section is intended to provide some specific examples of reforms that have been attempted outside the United States. Some of the ideas represented in these reforms may be relevant to America, and others will be of less direct usefulness. Few, if any, of the reforms will be immediately transferable. The reforms are also interesting since they show both successes and failures and indicate some of the problems of implementation. This highly selective listing is intended to provide a general overview of a complex yet exciting element of academic development in comparative perspective.

The variety of reform efforts around the world indicates that there is no single path to university reform. There seem to be few common threads to the reforms, except perhaps in efforts to deal with the consequences of expansion and the unrest of the 1960s. Many factors influence the reform equation in different countries: the particular educational philosophy, the role and history of the university in each country (or even in a single state or region), the societal elements that exercise power over educational policy, and the financial abilities and priorities of the state. It is, perhaps, surprising that the Federal Republic of Germany has been able to implement substantial reform in a historically strong, somewhat decentralized, and deeply conservative academic system although the Japanese, with considerable central authority and a series of foreign models for their universities, have been unable to make much headway. The examples that follow show success and failure and indicate some of the many ways of approaching issues of reform in higher education.

Japan

With the third largest higher education system in the world (after the United States and the Soviet Union), Japan's academic system is a combination of the American pattern of differentiated institutions and the German model of a highly centralized and hierarchial structure. Japanese higher education, quite elitist before World War II, expanded quickly under the American-imposed reforms following the war (Cummings, Amano, and Kitamura 1979). In a sense, Japan exhibited the worst of its previous elitist system and of the Americanized democratic system, with large but often ill-equipped universities dominated by a professional elite. Japan's higher education system was shocked by student unrest in the 1960s, and the

reaction resulted in the "big bang," which stimulated discussion of reform and resulted in modest change in the academic system.

Without the major crises of the 1960s, which were impelled by widespread and disruptive student activism, it is unlikely that there would have been much impetus for reform. The crises forced the powerful Ministry of Education—which has considerable power over both the publically funded and highly prestigious national universities and over private and other institutions—to act. The ministry produced a number of reform proposals. In addition, a large number of universities initiated their own reforms, usually in response to student activism. It has been estimated that several hundred reform proposals were generated in the 1960s by colleges and universities.

Japanese higher education has long been dominated by a rigid hierarchy of institutions, with the University of Tokyo at the top. Its universities have been characterized by the absolute power of the senior faculty. Widespread criticism of the out-of-date curriculum, the famous "examination hell" (the highly competitive series of entrance examinations that students have to take in order to gain admission to the best institutions), overcrowding, and other matters did not move either the universities or the government to ameliorate the situation until student unrest disrupted a large number of institutions and focused national attention on the plight of higher education. A national plan for dealing with student disruption and, to some extent, for improving the situation in higher education was drafted by the Ministry of Education, in collaboration with university officials. The plan met with widespread opposition from the faculty and near total opposition from students, as both groups were politically radical in orientation (University Reform in Japan 1970).

Individual universities also developed elaborate plans for change. It was estimated that several hundred individual plans were drafted. The proposals ranged from general democratizing of the structure of governance (a very common theme) and providing participation to junior staff and students, to restructuring the curriculum. Many of the reform plans were quite idealistic in nature and, despite their idealism, generally were opposed by the activist students, who felt that anything short of revolutionary change was inappropriate. Senior staff, in many cases, reluctantly supported the reforms, in part because they were unable to pose any reasonable alternative. The impetus for the reform plans at the individual university level, as at the national level, was a response to the student disruptions of the period rather than an intrinsic commitment to reform.

Once the drama of student disruption had subsided and the

universities were no longer in the limelight, pressure for reform diminished considerably. Indeed, many of the reform proposals of the Ministry of Education were not realized (Cummings 1974). Very few of the local reforms were implemented. Most observers agree that despite student activism and government intervention of the 1960s, the nature of Japanese higher education has remained basically unaltered. The serious lack of financial resources to implement reform was no doubt a contributing factor, but the deeply conservative nature of the academic system was probably more important. Perhaps significantly, the one change made at the national level was the passage of several laws permitting the government to intervene in university affairs in cases of disruption.

Despite the lack of basic change, a number of reforms were implemented. Perhaps the most visible was the construction of the new University City at Tsukuba, near Tokyo. The intention was to develop a "new model" university, but this aim has been only partially achieved, as the academic program and structure of the new university are similar to those at the established institutions. Tsukuba combines on one large campus a number of typically separated academic specialties, such as the arts and sciences, education, and others. Tsukuba has yet to prove itself as a prestigious element in the Japanese higher education system, but it is a viable institutional complex. The Ministry of Education also has been concerned with the "internationalization" of higher education in Japan and has tried to make the academic system less insular. The United Nations University, lured to Japan by a $100 million grant, brings a certain international consciousness. Other efforts also are evident as more foreign students have been accommodated in Japanese universities, visiting professors invited, and other programs implemented (Kobayashi 1979). It is perhaps significant that a university system that has imported many of its models and practices remains concerned with an international perspective.

Thus, despite a "big bang," government pressure, and widespread recognition that severe problems existed, no systemic changes occurred in Japanese higher education. Those that have been implemented, while significant, have not altered the basic nature of the system. It is probable that the major cause for the lack of fundamental change was the absence of a consensus within the universities concerning the nature of the appropriate change and a lack of conviction by governmental authority, which in the Japanese system does have the power to force policies on most of the educational system if it desires. The development of consensus is important in Japanese society generally, and there has been a dramatic lack of unity of views concerning the nature and direction of higher education. Thus, although change has occurred at the

margin, the basic structure of Japanese higher education has not been altered.

Federal Republic of Germany

The West German educational system is highly complex since Germany, like the United States, is a federal system. There are, as a result, few national generalizations that can be made. As indicated earlier, the German university model, developed in the 19th century, was a powerful influence in many countries and remains crucial in Germany (Ben-David and Zloczower 1962). The key element of the traditional German university is the absolute power of the full professor, and it is rare that the academic oligarchy has supported reform efforts. Despite the fact that German academics are civil servants, there is a strong tradition of academic self-government and autonomy (Ben-David 1977). These elements all have made reform controversial when it has been proposed and difficult to achieve.

Despite a conservative academic tradition, there has been more reform in West Germany than in Japan, and West Germany has constituted one of the key "laboratories" for the study of university reform. It is a particularly interesting example, since there are major differences among the German states (*länder*). In general, those states, such as Bremen and West Berlin, that have had governments with Social Democratic majorities, have moved more actively toward reform than states, such as Bavaria, that have been ruled by the more conservative Christian Democrats.

A number of factors have impelled reform efforts in West Germany. Perhaps the major underlying element has been expansion—the German higher education system has more than doubled in size in less than 20 years. In addition, West Germany was swept by dramatic and often violent student unrest in the 1960s. The major West German student organization, the SDS, unlike its counterparts in most other countries, was actively concerned with university reform and drafted a detailed reform plan that provided an influential model (Nitsch 1965). It was clear to many that the traditional university structures could not accommodate the ever-growing student population, nor could they deal with the expanding role of higher education in the society and the multiplicity of emerging specializations. Non-university postsecondary institutions proliferated, and there was a move to incorporate them into a coherent postsecondary education system.

The German reforms began before the student revolts of the late 1960s. As Böning and Roeloffs (1970) have pointed out, three new universities were planned as early as the late 1950s and were

opened in the mid-1960s. These three institutions, Aachen, Konstanz, and Bochum, in different parts of the country, incorporated new ideas concerning the organization and governance of higher education, although they did not go as far as some of the later reforms. A more elaborate administrative system, including a president as executive head of the university, a wider range of student self-government and participation, a wider selection of curricula, and attempts to break down the walls of the traditional academic specialities were part of these reform efforts. These new institutions were, in many ways, precursors of the more radical reforms of the following period. Thus, although recognition of the need for change in German higher education did not begin with the student revolts, there is no question that the pace of reform was increased in a partial response to the challenges of the student movement.

The various elements of German reforms of the 1960s and 1970s are significant, not only because they have changed parts of an important university system, but also because these reforms have been influential elsewhere in Europe. The following enumeration of some of the important reforms is intended to provide a brief indication of the nature and consequences of some of these changes.

Gesamthochschule. The concept of the unified university has been discussed earlier in this essay. This effort was aimed at providing coherence to increasingly diffuse and uncoordinated institutions functioning in the postsecondary education sector. As West German higher education expanded, a decreasing proportion of students were in the traditional universities. Specialization of institutions grew, and there was a desire to provide opportunities for interdisciplinary work and a demand that many of the non-university postsecondary institutions be given greater recognition of their quality and role. These pressures led to the development of the *Gesamthochschule*, which provided an administrative and academic center for a variety of postsecondary academic programs in a specific geographical area, usually a city. The *Gesamthochschule* concept has not yet amalgamated any of the well-established universities with other institutions in their region, but rather has linked some of the newer institutions or has upgraded and combined existing non-university-level institutions. These innovative institutions now function in a number of German states, notably those in the north governed by the Social Democratic party.

Drittelparität. The demand to democratize the hierarchical traditional German university was one of the key thrusts of the student movement of the 1960s. The traditional structure gave all power to

the full professors, with virtually no participation in any aspect of academic decision making to the other levels of academic staff, and none to students. Pressure had been mounting for some time to include junior academic staff in the governance process, particularly since the numbers of such staff grew dramatically during the expansion of the 1950s and 1960s. Many of these individuals, particularly in the social sciences, had experience in the student movement and few were fully socialized into the traditional German academic system. As the student movement grew, demands for student participation also were heard. Without question, the traditional structure was not functioning effectively, since the very small numbers of senior professors could not efficiently govern a large and complex university. In addition, the senior academics were unwilling to move in the direction of interdisciplinary teaching, nor were they usually interested in reforms of any kind.

The system of "participation," as it is known in Europe, took a number of forms (Mason 1975-76). In West Germany, it generally involved expanding participation in the governing structures of universities, from the lowest to the highest levels, to junior staff and to students. In a few instances, non-academic university staff also participated in decision making as well. The issue of participation has been one of considerable controversy in West Germany as well as in the Netherlands and France. The senior faculty has, almost without exception, opposed it and in a few instances, such as at the Free University of Berlin, a number of senior staff resigned. In many cases, participation contributed to a growing politicization in academic affairs. Elections to key university posts, for example, became contests between the candidates of groups closely identified with political ideologies (International Council on the Future of the University 1977). With the inclusion of students in the governance process, in the 1970s many of these elections were won by younger junior academics of a radical persuasion. The reaction among senior academics against the democratized system included an ultimately successful legal suit that claimed that *drittelparität* was in violation of the basic nature of the German university enshrined in the German constitution. At present, senior professors must have a majority vote in most governance committees, and the "pure" efforts at participation generally have been abandoned in West German higher education.

German universities also have experimented widely with interdisciplinary structures of various kinds. The traditional German academic system was very much tied to the traditional disciplines and cross-fertilization was difficult. Much of the impetus for recent reforms came from a reaction against the rigidity of the traditional

system. In a number of universities, particularly the newer ones and in the *Gesamthochschulen*, interdisciplinary centers have been set up focusing on specific topics. For example, several institutions have established interdisciplinary centers for the study of higher education that include economists, sociologists, curriculum specialists, and others. Academics hold primary appointments in these interdisciplinary centers, and students can specialize in these centers. Although a number of the established universities have retained the traditional academic structure, other institutions have experimented with various kinds of interdisciplinary structures. A number now are well entrenched, and a few, such as the John Kennedy Institute for North American Studies at the Free University in Berlin, have international reputations.

Several of the newer German universities were established with innovative governance, curricular, or thematic models (Böning and Roeloffs 1970). These, for the most part, have been successful. Although it would be an exaggeration to state that German higher education has been transformed by the innovations and reforms of the past two decades, considerable change has occurred. The reforms have been varied and relatively widespread. They remain a matter of considerable controversy, and in recent years there has been a significant conservative trend. Even some of the "new model" universities—such as the University of Bremen, which at first incorporated full participation at all levels of its governance structures to everyone associated with the university—have abolished some reforms. The senior faculty, which never accepted the changes, has tried, with some success, to sabotage or delay reforms, and on several occasions has gone to the courts to undo changes. Thus, the reforms are by no means fully entrenched in the system, but a consciousness of the need for change has been an important outcome of the controversies of the recent period.

Sweden

Without any question, Sweden above all others has been most changed by conscious reform efforts in the past 20 years. Swedish higher education, traditionally a small, highly elitist, and well-established system, has been changed radically as the result of a series of reforms developed by government commissions and implemented with government initiative. Sweden's educational system, in contrast to that of West Germany, is highly centralized, and this permitted government initiative to radically restructure the universities. Under the leadership of the Social Democratic government (it is significant that when the Social Democrats were replaced by a conservative coalition, the reform process continued) an

appointed commission issued a report in 1968 (dubbed the U68 Report) that recommended widespread changes in Swedish higher education (Higher Education 1973). Most of the recommendations were accepted and were systematically, if slowly, implemented. There was much opposition to the proposals from prominent Swedish academics as well as from foreign observers (Anderson 1974; Husen 1976-77). As in West Germany, the senior faculty was strongly opposed to the reforms and attempted to halt and then to slow implementation. A decade was required to put most of the changes into effect.

The U68 reforms fairly substantially reorganized the basic structure of Swedish higher education. Traditional autonomy was limited when the national government assumed control over such policies as deciding on how many students can be admitted to a particular faculty. The traditional departmental and chair structures were altered to permit interdisciplinary study and research. Higher education was both expanded in size and spread more widely throughout Sweden. Specific academic programs were established in parts of the country that previously did not have access to postsecondary education.

Perhaps the most dramatic reform was to link higher education more directly to the economy and the labor market in Sweden. Government policy determined the numbers of students entering specific fields based on estimates of the jobs available and the needs of the economy. Subject-matter areas were related more closely to expanding technologies and to industrial needs and developments. Again, control was taken away from the academic oligarchy and placed in the hands of committees of government, worker, and industry representatives in which academics also participated. The basic thrust of the reform effort was to link higher education with the economy and to prevent the over-production of graduates in the liberal arts.

There were also efforts to expand the clientele of higher education to assist social mobility and to provide access for sectors of the population not served previously. Admissions procedures in some fields were altered and recurrent education was encouraged. The proportion of older individuals in the student population was expected to rise. Traditional academic degrees were deemphasized, and stress was placed on "short courses" linked to specific job qualifications. By expanding higher education facilities to fairly remote parts of the country, it was felt that access would be increased. In addition to academic qualifications, such factors as work experience is taken into account for admission, and special attention is paid to individuals from lower socioeconomic backgrounds, older persons, and the like (Bergendal 1974).

The Swedish reforms were aimed less at providing student participation in academic governance (there was no major student unrest in Sweden during the 1960s) than at basically changing the role of higher education in a complex industrial society. For this reason, the Swedish reforms are quite different from the general efforts in other nations and are particularly important. The Swedes were able to achieve considerable success, at least at the level of implementing the recommendations of the U68 Commission, because Sweden is a small country with a highly centralized governmental and educational system in which decisions made at the top can be implemented without major difficulty. The stability (at the time) of 40 years of entrenched rule by the Social Democrats and the commitment of the prime minister (who was formerly minister of education) also helped the process of implementation. Funds were available for the considerable expansion of the system envisaged by the reforms, and this helped to defuse some of the opposition from the academic community. There was vocal opposition from senior academics and some others, who correctly felt that their power was to be severely limited by the reforms. There was also questioning of the basic idea of closely linking the universities and the immediate needs of the economy in the narrow sense of such a linkage. As Husen (1976-77), has pointed out, the traditional role of the university in basic research will be called into serious question by these changes. In addition, some economists noted that the art of manpower forecasting is imprecise at best and linking enrollments to projected employment needs may backfire.

Despite these and other questions, the U68 reforms were implemented by the government and by the central higher education authority (the office of the chancellor of the Swedish universities). Despite considerable opposition, the established universities had little choice but to accede to the reforms. There is as yet no full analysis of the reforms in English, and it is probably too early to assess their results. The fact remains, however, that Sweden has gone further in its program of reform in its higher education system than any of the industrialized nations. The lessons of the successes—and failures—of the Swedish reforms will be significant for other countries.

Great Britain

In a way, Britain is an example of low reform in higher education, since change has been gradual (Driver 1972). The traditional arrangements of the established universities have not been altered, and, in general, there has been only modest growth in the established institutions. The British recognized the need for expansion

of postsecondary education in the influential Robbins Committee report of 1963 (Committee on Higher Education 1963). They also felt that very large institutions were not conducive to high-quality education nor to the maintenance of an academic community, and most British universities have maintained enrollments of under 5,000. Expansion was achieved by establishing new universities, mostly in some of the more important provincial towns. The British also were committed to maintaining the traditional standards of higher education, and there is less variation in the quality of instruction today in Britain than there is in the United States.

Thus, the basic British approach to expansion in the 1950s and 1960s was to go fairly slowly, to maintain academic standards, not to change the established institutions, and to absorb most of the growth in new institutions. The British also greatly expanded the non-university postsecondary education sector by building new colleges of advanced technology, colleges of education, and the like. Some of the colleges of advanced technology were upgraded later to university status. A commitment was made to maintain high standards in the non-university postsecondary sector through the establishment of the Council for National Academic Awards (CNAA), a body dominated by university academics that supervises examinations and the awarding of degrees in the non-university postsecondary area.

The late 1950s and especially the 1960s saw the establishment of a number of new universities. Although maintaining the basic British academic tradition of undergraduate education, several of these new institutions tried innovative organization or curricular patterns. One of the best known experiments was at the University of Sussex, where traditional departments and chairs were abolished in favor of schools of studies. At several of the new universities, the traditional Oxbridge-style college was used in an effort to create a central focus for student life. In some cases, these colleges were tied to academic specialties or themes. The new universities were "campus-based" and often located outside metropolitan areas (Perkin 1969). In general, traditional patterns of governance were maintained and students were not included in decision making. Most observers have been satisfied that the new universities have met the expectations of their planners in terms of acceptable academic standards. They have disappointed some because virtually all of them have stayed quite close to the traditional norms of British university education in which Oxford and Cambridge are seen as the arbiters of quality and direction.

The non-university sector has been, in some ways, the most interesting development in the growth of British higher education in the past two decades. The development of the polytechnics,

many of which are now as large as universities, the growth of the colleges of advanced technology, and the strengthening of the colleges of education (now under severe stress for budgetary and enrollment reasons) are all innovations in British higher education. While they, too, are influenced by the established universities through the CNAA, which controls the awarding of many degrees, they have felt themselves more at liberty to strike out in new directions in terms of the curriculum, and most have developed a "practical" curriculum, with links to industry and technology. They also have pioneered the development of "sandwich" courses and other part-time non-degree curricular offerings, many of which have links to industry.

The most well known British innovation in higher education is the Open University, established in 1971 with the aim of providing university-level education to individuals who could not study full time on a campus (Tunstall 1974). The Open University's use of televised instruction, specially written textbooks and other materials, mail tutorial interaction with instructors, and short summer courses is innovative and has proved highly successful. The Open University is being adapted in such countries as Japan, Iran, and Pakistan, and several American universities have adapted Open University syllabi for use in the United States.

The Open University concept was developed during the Labour Party government as a means of providing opportunities for university education to individuals who were unable to take advantage of the traditional universities, which have been limited largely to the middle classes and the British elite. Thus, the Open University was as much an effort to provide social mobility and access as it was a curricular experiment. According to preliminary research, the Open University has been more successful in its curricular innovations than in providing working-class individuals with significant access to a university degree (McIntosh 1977). Unlike the traditional universities, the Open University has relatively relaxed admissions requirements, but it has been noted that the applicants generally have a high level of ability, and the dropout rate has been modest. Observers have praised the quality of the course materials, the innovative ideas used in developing the curriculum, and, especially, the mix of readings, television lectures, and summer discussions and tutorials. The Open University also has been fairly cost effective, although it has been extremely expensive to develop the initial curricular materials.

The traditional university leadership in Britain was skeptical about the concept of the Open University, but since it posed no threat to their status or perquisites, they did not express active opposition (Perry 1977). Indeed, in this respect, the Open Uni-

versity is a fairly traditional British innovation—it builds on the existing structure without upsetting established academic norms and tries to include the basic orientation of the established academic system as part of its ethos.

The current economic crisis in Britain, combined with a decline in enrollments in higher education in a number of areas, has produced a crisis of unprecedented proportions for higher education. Many of the innovations of the Robbins era are under attack as budgets are slashed. The new universities are nevertheless safe in terms of their continued existence and the Open University also is well entrenched. But a number of other postsecondary institutions, such as colleges of education, have been closed or amalgamated with other institutions. The traditional British means of funding higher education also has been on the defensive (Caine 1969): the University Grants Committee has been an effective buffer between the central government, which provides the bulk of funding, and the universities.

The British reforms, which have been less dramatic than those on the Continent, have been achieved with less upheaval. If there has been less than full consensus in the academic community, at least the reforms did not engender major revolt. The British academic system, now under stress because of economic crisis combined with enrollment decline, remains basically unchanged. Yet, the reforms of the past 20 years, the dozen or more new universities (some with innovative features), the Open University, and the CNAA as a means of maintaining quality in the non-university postsecondary sector are all significant changes in British higher education.

France

As a final European example of the reform process, it is appropriate to briefly consider France, the country most dramatically affected by the student unrest of the 1960s. Reform of higher education in France has been a topic of considerable concern since the 1950s, when expansion began in earnest (Grignon and Passeron 1970). Rapid expansion, student unrest, an outmoded administrative apparatus, and a demoralized professoriate all combined to force the French government to consider major reforms in the universities. The student revolt of 1968 added significant impetus to the reform process. In a sense, France's reforms were very much in the "big bang" model of Japan.

The major reform law, promulgated by Edgar Faure, education minister, and passed in 1968 in the aftermath of the student revolts, promised major reform in the French university system (Patterson

1972; Cohen 1978). The French educational system, which is highly centralized, permitted this top-down reform process, and the universities had little choice but to accede. There is major controversy concerning whether the French reforms were, in fact, successful and whether they achieved the goals for which they were intended (Fomerand 1977), but this issue is beyond the scope of this essay.

The Faure reforms were aimed at accommodating the expansion that had taken place and that was expected to continue by altering the structure of higher education. The three key elements of the reforms were participation, autonomy, and interdisciplinarity. These emphases are very much in keeping with the mainstream of reform in much of the rest of Western Europe at this period.

Participation. The Faure reforms mandated that the universities establish councils of elected teachers and students. Academic staff was divided by rank, and students by their year in the university. The composition of the councils, however, was weighted in favor of the teachers. The participatory arrangement has politicized academic decision making in a number of institutions, and several universities, or, more frequently, academic areas, have become known as much for their political allegiance as for their academic excellence. The organized student groups on the left found the arrangement unsuitable and have in many instances boycotted elections. The proportions of students voting at various levels in many universities is fairly low. The senior faculty has retained a good deal of its power through the system of academic patronage that ties many junior staff to it. In short, although the new participatory arrangements have been implemented in France and there have been some changes as a result, the reforms have not had their intended effects in many respects (Verne 1978).

Interdisciplinarity. The major change of the Faure reforms was the elimination of the faculties, the key element of the traditional universities (Patterson 1972). Instead of 23 identical universities, each divided into five faculties, after the reforms there were 65 universities with more than 720 UERs (*unités d'enseignement et de recherche*—units of teaching and research). The reformers wanted to reduce the size of what were felt to be overly large and unwieldly universities and to break down the barriers between fields of study and research. The UERs, which became the basic building blocks of the universities, define their own foci and orientations within some limits and are free to develop links with other UERs. The UERs developed new courses of study, a key step in fostering interdisciplinarity, and stress was placed on linking academic programs to societal needs.

There has been considerable controversy concerning the success or failure of the UER arrangement. Some have argued that the very autonomy of the UERs permits them to be even less interdisciplinary than was the case in the traditional universities, and there is evidence to support this criticism in some instances. In some cases, however, the UER structure has permitted groups of academics in different fields to develop quite innovative teaching styles and topics of interest. Overall, however, despite radical restructuring of the universities, the UERs have not caused a dramatic shift from the traditional pattern of teaching and learning and from the fairly established disciplines.

Autonomy. The final major reform of the period was an attempt to provide autonomy to the universities, breaking from a tradition of extreme centralization. The reform laws provided considerable leeway to the UERs to hire academic staff and to make decisions concerning educational programs and curriculum. Degree-granting structures were, in some instances, turned over to the universities, ending governmental control. Advisory bodies were created so that the Ministry of Education would have some guidance in making decisions concerning higher education. There has been little success in creating meaningful autonomy, however, since the government, when faced with challenges, has taken back some of the autonomy offered in the original reforms, and, in general, has been less than hospitable to the concept of autonomy is most areas of academic decision making. Most observers feel that this aspect of the French reforms has not been very successful.

Without question, French higher education was structurally transformed by the Faure reforms, and emphasis was given to change in the three major areas identified by the government for reform. There has been considerable debate concerning the success of the reforms. Radical students have bitterly criticized the reforms for not going far enough. Senior academics have in many cases not accommodated themselves to the changes. The national government has been dissatisfied with the "responsibility" of the academics and has, in the area of autonomy, taken back some of the freedom it had provided. Although some of the UERs have fulfilled their mandate to create new and innovative teaching and research programs, the majority are not much different than the previous academic programs. The universities are smaller and perhaps, thereby, more manageable, although there is little evidence on this latter matter as yet. Some of the universities have been infused with partisan politics. Politics, present in the traditional universities, has been more prevalent in the reformed and

more participatory institutions. Nevertheless, France attempted, with considerable seriousness and under great pressure, to transform its higher education system. Its centralized educational system permitted these reforms to be implemented rapidly by government decree.

India

As a Third World nation with a large higher education system (more than three million students), India has devoted considerable attention to reforming its universities. Despite efforts spanning three decades, there has not been significant change in Indian higher education other than dramatic expansion in the number of students and a concomitant growth in the number of colleges and universities (Altbach 1972). Most recently, the influential Education Commission recommended a series of changes in Indian higher education (Ministry of Education, Government of India 1966). A few of these reforms have been implemented but most have not. The commission was emphatic that the rapid growth rate in postsecondary education—often a 10 percent increase per year during the 1960s—should stop. Not only were the universities and colleges unable to handle the increases, but also jobs were not available for a high percentage of the graduates. The growth rate did subside modestly, but due more to market conditions than because of the commission's recommendation or government policy. The commission also stressed the importance of maintaining standards in higher education, particularly at the undergraduate level. To this end, the establishment of autonomous colleges was recommended. These undergraduate institutions would be free of the lockstep regulations of the universities, which traditionally have "affiliated" the more than 2,000 undergraduate colleges. While a few autonomous colleges have been sanctioned, this reform has not had much impact. Efforts have been made to upgrade the academic profession by improving salaries and by raising academic qualifications. After a decade of efforts, these modest changes were achieved in most of the Indian states. The commission also recommended shortening the undergraduate curriculum to three years and adding a one-year pre-university course, similar to the American junior college. This reform also was implemented in most states but only after a decade of struggle. Other major reforms, such as linking the curriculum more closely to the needs of industry and government, have not been successful.

There are a number of reasons for India's overall lack of success in the reform of higher education. As a federal system, the Indian states have major responsibility for education, and in many cases

they have been unwilling to follow central government directives. The University Grants Commission, a semi-autonomous agency with responsibility for administering central government funds to higher education, has no power to enforce directives but only to stimulate change by providing funding. Since the bulk of funds for higher education are provided by the states, the commission's power is limited. Perhaps most important, the entrenched traditionalism of the colleges and universities has been supported by a powerful middle class, which relies on university education as a certification for remunerative jobs.

The few dramatic successes in Indian higher education in the post-independence period generally have been developed outside the traditional university structure and have not threatened established practices. Establishing the prestigious and highly regarded institutes of technology, building a number of agricultural universities to do research and train personnel for India's agricultural sector, and developing a number of other specialized educational institutions all have been outside the traditional university sector.

India's example indicates that it is difficult to implement reform in a Third World context, particularly in a country that has a democratic political system and a highly articulate and powerful educated middle class. However, even countries with an authoritarian political system and clearer social goals have found the process of educational reform difficult. A good example of a country experiencing such difficulty is China, which has tried a number of roads to educational reform without full success (Shirk 1979).

These case studies of higher education reforms in other countries have relatively few common elements and have been presented to indicate the range of reform that has been proposed—and in some cases implemented—overseas. Some of these reforms may be relevant, at least in part, in the United States. Others will not be especially useful in the American context. The detailed study of the process of success, or failure, of the reforms is beyond the scope of this essay. But such an analysis would be significant for understanding in more detail the complicated process of implementation of university reforms.

Summary and Conclusions

The 1960s and 1970s were decades of unprecedented change in many countries. Not since the German academic model triumphed as a international guide to university development in the 1870s has there been so much ferment in higher education. Pressures for expansion, technological development, and accountability caused changes in universities. Stimulated by the worldwide student unrest of the 1960s, the pace of reform throughout the world has been at an unusual level.

Additional and, in many ways, quite different pressures will cause further change in this decade. Demographic shifts common throughout the industrialized world, mean that the growth of the college-age population has virtually ended. In many nations, the relevant age group is actually declining in numbers. Attitudes toward higher education, in part stimulated by the crises of the past several decades, have changed and will cause further problems in maintaining public support for academic institutions. Seemingly intractable economic problems will mean additional difficulties for institutions of higher education and make reform increasingly difficult.

In view of these challenges, it is remarkable that the traditional model, ethos, and orientation of the university have shown so much resiliency. The faculty, although contributing little to the debate concerning academic reform, has been a key factor in maintaining the basic orientation of the university. In most countries, there is simultaneous pressure for change and resistence to it. In the long run it is likely that considerable change will occur, but it is also likely that universities will retain their traditional identities and, to a considerable degree, their organizational structures. Universities are remarkably conservative institutions in many respects, and some would argue that this very conservatism has kept higher education infused with a broader perspective that has sometimes resisted ill-advised reforms in the name of relevance or accountability. Others hold that the traditional university is a vestige of a bygone era and has limited the creation and diffusion of knowledge.

Virtually every aspect of university reform is complicated and difficult to predict, plan, or implement. For one thing, the analytic tools of the planner are, as yet, at a fairly early stage of development. Manpower forecasting, for example, is by no means foolproof. Yet the state of the art has improved considerably in recent

years, and efforts like those of the Robbins Committee in Britain, the Carnegie Commission in the United States, the Education Commission in India, and the U68 Commission in Sweden indicate that careful research and analysis can yield useful results, even if all recommendations are not fully implemented.

Higher education reform is an intensively political endeavor, and one of the greatest problems in the setting of reform goals and the implementation of specific proposals is obtaining the appropriate agreement from the many, and often conflicting, groups affected. Compromises are often necessary; frequently, what begins as a radical reform emerges as a finished product that varies little from established practice. Once a reform has been implemented, it is necessary to evaluate it carefully. Unfortunately, the evaluation process often is left out of the planning and implementation of a course of action—and as a result there is a problem in analyzing the relative success or faulure of a specific reform.

In an age of technology it is not surprising that few have examined the ideological, philosophical, and historical roots of higher education in the process of changing institutional policies and practices. The trend has been in the direction of dealing with relatively limited technical problems that can be solved by changing a structure, making specific changes in the curriculum, or through other limited means. It is significant, for example, that the Carnegie Commission features no fully articulated statement on the role of the university. The U68 Commission in Sweden did posit a specific role for higher education and in this respect was more forthright than reforms in other nations, including, often, those in the socialist countries of Eastern Europe.

Change is inevitable in higher education, and the major engine driving change and reform in the past two decades has been expansion and its implications. It is likely that the management of declining as well as changing roles for postsecondary education will motivate much of the change of the next decade. It is not whether change will occur that is in question, but rather how academic institutions, governments, and societies will deal with change. Change can occur, as it often has in recent years, with a process of random growth—or contraction—or a conscious policy of reform that can help guide academic institutions through a difficult period.

This comparative discussion has posited no panaceas for reform, no methodologies for the study of reform, and relatively few models that might be followed in the United States. Yet, it has indicated that America is not alone in facing perplexing issues. Further, it has pointed out some of the varying approaches to the process of university reform and some of the equally diverse results of the efforts at planned change in higher education. If it is any

consolation, relatively few countries have been fully successful in the management of change. The comparative approach can at least broaden perspectives and suggest different ways of seeing key issues.

Bibliography

This selected bibliography is intended to provide a broad overview of higher education reform in a variety of national settings as well as to list some of the key general discussions of reform. The bibliography does not list any specifically American materials, although the literature on higher education reform in the United States is very substantial. The literature in languages other than English is considerable as well and has not been cited here to any extent. Nor is much stress placed on the general social science literature concerning the process of change in general. It is hoped that this bibliography will permit the reader to obtain a basic understanding of specific examples of higher education reform in a range of countries.

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